CLAIMS:

Please amend the claims as follows.

1. (Original) A computer system comprising:

a plurality of shelves, each shelf having a carrier for removably receiving a plurality of information processing modules and a switching module, and an interconnection member for providing connections between the information processing modules and the switching module;

wherein the switching modules of the respective shelves are interconnected in a logical stacking configuration to form a logical stacking arrangement.

2. (Original) The computer system of claim 1, wherein the logical stacking configuration is a closed loop stacking configuration.

3. (Original) The computer system of claim 1, wherein one switching module within the computer system is operable as a master switching module.

4. (Original) The computer system of claim 3, wherein any switching module within the computer system is operable as the master switching module.

5. (Original) The computer system of claim 4, wherein only one switching module within the computer system operates as a master switch at any given time.

6. (Original) The computer system of claim 3, wherein all switching modules in the computers system other than the master switching module are operable as slave switching modules responsive to the master switching module.

7. (Currently amended) The computer system of claim [[3]]1, wherein ~~the master switching module provides a single ingress/egress point for data transfer to/from the computer system~~ the shelves are logically connected into a plurality of stacks, wherein

the switching modules of the respective shelves in each stack are interconnected in a logical stacking configuration, wherein the computer system further comprises a master shelf including a carrier for removably receiving a master switching module, wherein the master switching module is connected into each stack as a common master switch for all of the stacks, wherein the master switching module is connected to the switching module of a first shelf and to the switching module of a last shelf in each of the stacks.

8. (Currently amended) The computer system of claim [[3]]7, wherein the master switching module of the logical stacking arrangement is a dedicated master switching module further comprising a system management module configured to provide system-level management functionality to the shelves in the stacks, wherein each shelf is coupled to the system management module via a management connection.

9. (Currently amended) The computer system of claim [[8]]7, wherein the dedicated master switching module is received in a dedicated master switching shelf further comprising a system management module coupled to the master switching module via one or more management connections, wherein the system management module is configured to provide system-level management functionality to the shelves in the stacks via the master switching module.

10. (Currently amended) The computer system of claim [[1]]9, wherein each switching module comprises a dedicated connections port for the interconnections of the logical stacking arrangement the master switching module is configured to multiplex management information from the system management module in with data content transmitted to the shelves via inter-shelf connections.

11. (Original) The computer system of claim 1, wherein each shelf comprises two switching modules removably received therein.

12. (Original) The computer system of claim 11, wherein both switching modules of each shelf are connected into a common logical stacking arrangement.

13.   (Original) The computer system of claim 11, wherein each switching module of each shelf is connected into a different logical stacking arrangement to the other switching module of that shelf.

14.   (Original) The computer system of claim 13, wherein each shelf is connected into two logical stacking arrangements, each switching module of the shelf being connected into a different one of the logical stacking arrangements, and wherein the each logical stacking arrangements provides equivalent connectivity between the shelves as the other logical stacking arrangement.

15.   (Original) The computer system of claim 11, wherein each switching module of a given shelf is operable to replicate the functionality of the other switching module of that shelf.

16.   (Original) The computer system of claim 11, wherein one switching module of each shelf is operable as a shelf level master switching module and wherein the other switching module of that shelf is operable as a shelf level slave switching module.

17.   (Original) The computer system of claim 11, wherein each switching module of a given shelf is interconnected with the other switching module of that shelf.

18.   (Currently amended) The computer system of claim [[17]]1, wherein the inter-switching module interconnection is made through the interconnections member of the shelf each shelf comprises two switching modules removably received therein, wherein the shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack are interconnected in at least one logical stacking configuration, wherein the computer system further comprises a master shelf including a carrier for removably receiving two master switching modules, wherein each of the master switching modules is connected into each stack as a common master switch for all of the stacks, wherein the computer system further comprises a system

management module configured to provide system-level management functionality to the shelves in the stacks.

19.   (Original) The computer system of claim 1, wherein each shelf also comprises a service processor module for providing management functions in respect of said information processing modules.

20.   (Original) The computer system of claim 19, wherein each switching module of each shelf comprises a service processor module.

21.   (Currently amended) The computer system of claim 1, wherein each switching module comprises at least one forwarding element for performing a forwarding ~~operating operation~~ and a respective controlling element for controlling the switching element.

22.   (Original) The computer system of claim 21, wherein each switching module comprises at least one switch fabric chip and a controlling microprocessor, and wherein the functionality of each forwarding element is performed by a switch fabric chip and the functionality of the controlling element is performed by the same switch fabric chip and the controlling microprocessor in combination.

23.   (Original) The computer system of claim 21, wherein each controlling element is aware of the topography of the stack.

24.   (Original) The computer system of claim 23, wherein each controlling element is operable to control the operation of the forwarding element to cause a unicast data element to be forwarded by its respective forwarding element using a shortest transmission path to its target.

25.   (Original) The computer system of claim 23, wherein each controlling element is operable to control the operation of the forwarding element to cause a multicast or broadcast data element to be forwarded once around the stack in a given direction.

26.   (Original) The computer system of claim 21, wherein each switching module is content aware.

27.   (Original) The computer system of claim 26, wherein the controlling element is operable to study a transmitted data element to determine a path to destination based on the content of that data element.

28.   (Currently amended) A computer system comprising:

~~first shelf means having carrier means for removably receiving a plurality of information processing means modules and a switching means module, and an interconnection member for providing connections between the information processing means modules and the switching means module;~~

~~second shelf means having carrier means for removably receiving a plurality of information processing means modules and a switching means module, and an interconnection member for providing connections between the information processing means modules and the switching means module;~~

~~wherein the switching means modules of the first and second shelf means are interconnected in a logical stacking configuration to form a logical stacking arrangement~~

a plurality of shelves, each shelf including a carrier for removably receiving a plurality of information processing modules and a switching module, and an interconnection member for providing connections between the information processing modules and the switching module;

wherein the shelves are logically connected into a plurality of stacks, wherein the switching modules of the respective shelves in each stack are interconnected in a logical stacking configuration;

a master shelf including a carrier for removably receiving a master switching module, wherein the master switching module is connected into each stack as a common master switch for all of the stacks; and

a system management module coupled to the master switching module and to an external management network via a plurality of management connections, wherein the

system management module is configured to provide system-level management functionality to the shelves in the stacks via the master switching module.

29   (New) A computer system comprising:

a plurality of shelves, each shelf including a carrier for removably receiving a plurality of information processing modules and at least one switching module, and an interconnection member for providing connections between the information processing modules and the at least one switching module;

wherein each switching module of each shelf comprises at least one forwarding element for performing a forwarding operation and a respective controlling element for controlling the switching element;

wherein each switching module of each shelf comprises at least one switch fabric chip and a controlling microprocessor, and wherein the functionality of each forwarding element is performed by a switch fabric chip and the functionality of the controlling element is performed by the same switch fabric chip and the controlling microprocessor in combination.